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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/677,003	10/01/2003	Arthur I. Watson	68.0416	7238

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EXAMINER

KERSHTEYN, IGOR

ART UNIT	PAPER NUMBER
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3745

DATE MAILED: 04/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/677,003

Applicant(s)

WATSON, ARTHUR I.

Examiner

Igor Kershteyn

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 25-30 is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/01/2003</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

Claim 5 is objected to because of the following informalities:

Claim 5 recites the limitation "the central abutment" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, and 7-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Shallenberg (3,238,879).

In figures 1-8, Shallenberg teaches a pumping system, comprising:
a submersible, centrifugal pump A having a first housing section 30, a second housing section 30, a unitary intermediate body D to which the first housing section 30 and the second housing section 30 are threadably engaged, a shaft 60,22 extending through the first housing section 30 and the second housing section 30, a plurality of impellers 50 and a plurality of diffusers 46 located within the first housing section 30 and within the second housing section 30, wherein the unitary intermediate body D absorbs

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compressive loading applied to a portion of the plurality of diffusers 46.

Note. The language of claim 1 “wherein the unitary intermediate body absorbs compressive loading applied to a portion of the plurality of diffusers” is not given any patentable weight because the apparatus of claim 1 is not distinguished from the prior art in terms of structure rather than function. See MPEP 2114.

Claims 1-3, 5, and 22-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Theron (3,864,057).

In figures 1-6, Theron teaches a pumping system, comprising:
a submersible, centrifugal pump 40 having a first housing section 44.2, a second housing section 44.1, a unitary intermediate body 46 to which the first housing section 44.1 and the second housing section 44.2 are threadably engaged, a shaft 50 extending through the first housing section 44.1 and the second housing section 44.2, a plurality of impellers 10.1, 10.2 and a plurality of diffusers 28.1,28.2 located within the first housing section 44.1 and within the second housing section 44.2, wherein the unitary intermediate body 46 absorbs compressive loading applied to a portion of the plurality of diffusers 28.1,28.2.

Note. See the Note above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Shallenberg (3,238,879) in view of Du et al. (6,688,860).

Shallenberg teaches all the claimed subject matter except that he doesn't teach the motor protector coupled to the submersible motor.

Du et al., in figure 1, teaches the pumping system 10, having a submersible motor 14 to drive a submersible pump 12, and a motor protector 16 coupled to the submersible motor 14.

Since Shallenberg and Du et al. are analogous art because they are from the same field of endeavor, that is the submersible pumping system art, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the pumping system of Shallenberg with the motor protector as taught by Du et al. for the purpose of protecting the motor from corrosive environment.

Allowable Subject Matter

Claims 25-30 are allowed.

Prior Art

Prior art made of record but not relied upon is considered pertinent to Applicant's disclosure and consist of two patents.

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Conant (1,555,635) is cited to show a pumping system having housing sections, an intermediate body, impellers but fails to teach diffusers.

Bower (3,098,450) is cited to show a pumping system having housing sections, an intermediate body, impellers but fails to teach diffusers.

Contact information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Kershteyn whose telephone number is **(571)272-4817**. The examiner can be reached on Monday-Friday from 8:00 a.m. to 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look, can be reached on **(571)272-4820**. The fax number is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308 0861.

IK
March 31, 2005

A handwritten signature in black ink, appearing to read 'Igor Kershteyn', is written over a horizontal line.

**Igor Kershteyn
Patent examiner.
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